

ONO FLASH MEMORY ARRAY FOR IMPROVING A DISTURBANCE BETWEEN ADJACENT MEMORY CELLS

5

ABSTRACT OF THE DISCLOSURE

To reduce the disturbance between adjacent memory cells,
10 an improved ONO flash memory array is implanted with a pocket on
one side of the channel of each memory cell or two pockets of
different concentrations on both sides of the channel, thereby
resulting in memory cells with asymmetric pockets. Consequently,
no disturbances occurred between adjacent memory cells when the
15 ONO flash memory array is programmed or erased by band-to-band
techniques, and the disturbances between adjacent memory cells
are also suppressed during reading process.